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V. C. C. Collum

REPORT ON THE EXCAVATIONS AT HEMBURY FORT, DEVON 1930

BY DOROTHY M. LIDDELL, F.S.A. (SCOT.)

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PROCEEDINGS OF THE DEVON ARCHÆOLOGICAL EXPLORATION SOCIETY

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Pl. I. Hembury Fort from the South. Showing the 1930 Cuttings

FOREWORD.

TO THE REPORT ON THE EXCAVATIONS AT HEMBURY FORT.

In introducing to our members the Report on the first season's work at Hembury Fort, the most important archæological exploration as yet attempted in Devon, the Joint Committee of the Devon Archæological Exploration Society and the Archæological Section of the Devonshire Association desire to express their thanks to Miss Dorothy M. Liddell, M.B.E., F.S.A. (Scot.), for her careful and scientific supervision of the work, and for the excellent Report she has rendered.

In doing so the Committee wish to recall briefly the incidents which led up to the decision to select Hembury Fort as the first site to be attacked. During the summer of 1929, Mrs. F. Rose-Troup, F.R.Hist.Soc., suggested to the Archæological Section of the Devonshire Association that an excavation on a large scale was desirable, approached the owner of Hembury Fort, Miss Kathleen Peek, and obtained her permission to excavate. Mr. C. A. Ralegh Radford, F.S.A., realising that such an undertaking was too large for the Section, suggested that the D.A.E.S. should be approached with a view to joint action. The motion was approved, the invitation given and accepted, and the Joint Committee formed.

The Committee desire to place on record their appreciation of the kindness of Miss Kathleen Peek and her tenant, Mr. Cockram, in permitting the excavation to take place, and their thanks are also due to Mr. Alexander Keiller, F.S.A., for the loan of surveying instruments and equipment.

In leaving the Report to speak for itself, the Committee wish to express their hope that sufficient funds will be forthcoming to complete the programme of three seasons' work at Hembury Fort, as originally contemplated. Although the first season's work is necessarily the least productive, sufficient evidence has already come to light to enable us to add a new paragraph to the history of our country during the obscure period which immediately precedes the coming of the Romans, but at least two more seasons will be necessary before it will be possible to complete the chapter and draw the final conclusions.

ROBERT NEWMAN
(*President Devon Archæological Exploration Society*).

E. L. RADFORD
(*President Archæological Section of the Devonshire Association*).

The Report was read, at their request, to the Society of Antiquaries on March 25th, 1931, and occasioned the greatest interest among leading authorities.

The complete Report, containing, in addition to the following, a Table of Identifications of the pottery, and a Table of the Implements, will shortly be lodged, together with the material relics recovered during the excavations, in the care of the authorities of the Albert Memorial Museum, Exeter.

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REPORT ON THE EXCAVATIONS AT HEMBURY FORT, DEVON, 1930.

By Dorothy M. Liddell, f.s.a. (Scot.).

Map References of Site : O.S. 1″ 139 C.2.
6″ LVIII S.W.
25″ LVIII 10 and 14.
Geological Survey 1″ Sheets 326 and 340.
Longitude 3°15′38″ W. Latitude 50°49′13″ N.

Foreword.

The position and structure of the great Camp at Hembury have already been so adequately described[1] that it is needless to spend time upon a general description of its colossal triple rampart, or to enlarge upon its impressive magnificence.

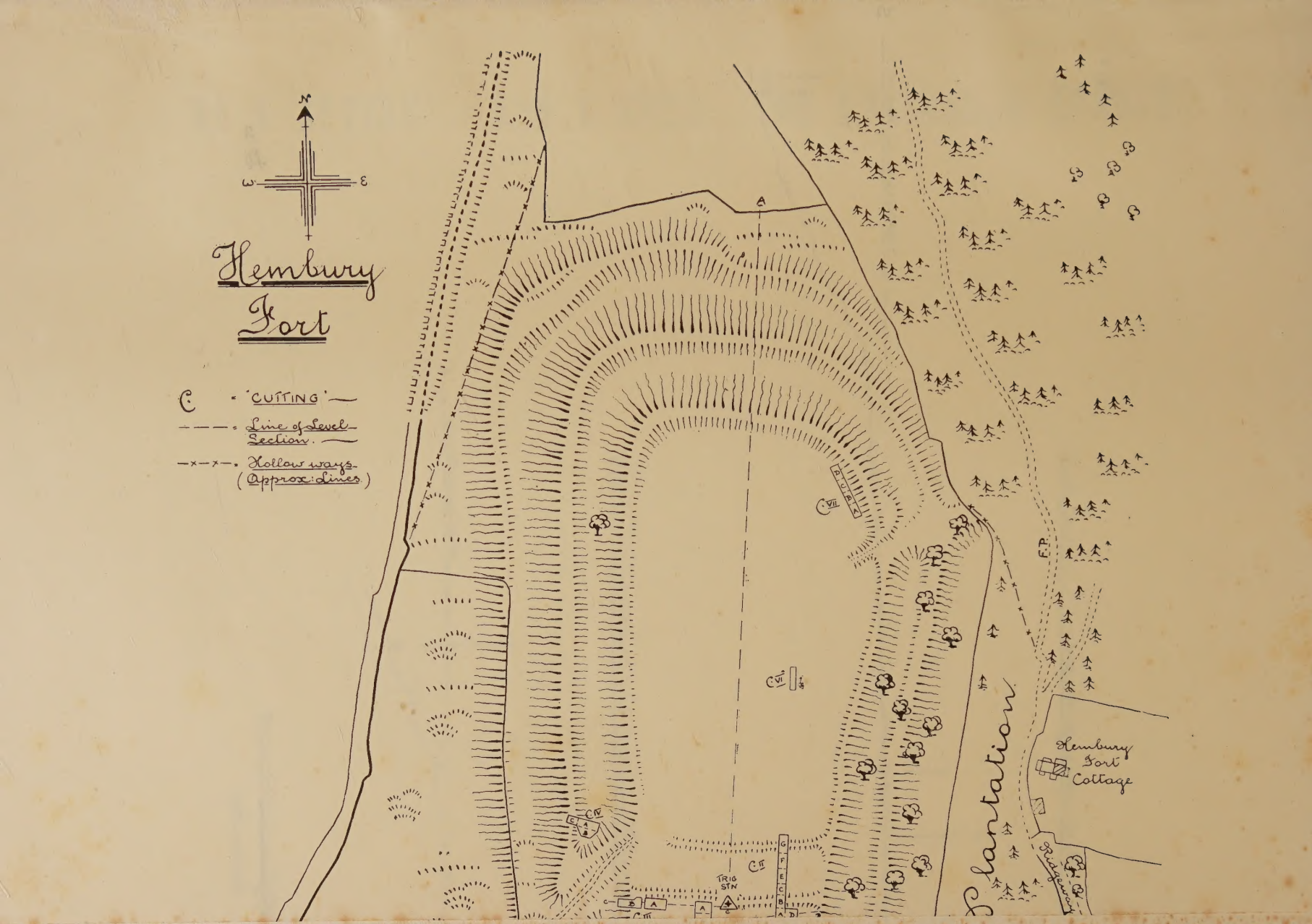
Dominating the surrounding country for ages past, this ancient fortress has come to share, with others of its type and period, traditions of Roman and Danish origin or occupation, of Druidic associations and of Norman or mediæval interference which only the cold evidence of excavation can confirm or dispel. The brief season's work in the Summer of 1930 achieved something of both. Some errors have been wiped from a page now at least left clean for the recording of proven facts, and evidence has been brought to light which shows the site to be solely of Early Iron Age occupation, the finds being consistently true to type and free from other influence. It was, in other words, a stronghold of the Damnonii, a cultured Celtic people, kin to the inhabitants of the Lake Villages of Glastonbury and Meare, and directly in touch with the Gauls and the Veneti on the Continent ; and who, it appears from a passage in Cæsar's Commentaries, sent their young men to serve in foreign fleets and take part in the Continental wars.[2]

It is, of course, clearly recognised that, great as the work of excavation seemed, while in progress, to those upon the spot, the huge cuttings make but slight impression upon a plan of the entire area, and that conclusions based upon the evidence of 1930 must remain open to modification by the results of subsequent investigations ; but another important result emerging from this year's work is, that places which obviously require, and would repay, further exploration, are now clearly indicated and that whereas it was at first difficult to decide where best to begin, the difficulty in future will be which of these tempting spots can wait till last.

GEOLOGY.

The Geological Map shows Hembury Hill to be of greensand (upon the Rhætic beds of lias and marls), most of the area of the Camp having upon this a capping of clay with flints.

[1] J. C. Wall : " Victoria County History of Devon," Vol. 1., p. 585.
J. C. Wall : " Ancient Earthworks," 1908, p. 41.
Hadrian Allcroft : " The Earthwork of England," 1908, p. 83.
G. MacApline Woods : " Proceedings, D.A.E.S.," Vol. 1 (1929), p. 4.
H. St. George Gray : " Proc. Som. Archæol. Society," LXV (1909), pp. 35—37.
[2] Elton : " Origins of English History," p. 236.


N
W
E
Hembury
Fort
C = 'CUTTING'
Line of Level Section
Hollow ways (Approx: Lines)
A
B
C VII
C VI
C V
C IV
C III
C II
TRIG STN
E.P.
Plantation
Hembury Fort Cottage
Ridgeway

Hembury Fort

C. = 'CUTTING'

– – – = Line of Level Section.

–x–x– = Hollow ways (Approx: Lines)

N

W E

Hembury Fort Cross.

Roman Road.

Roman Road

To Honiton

Hembury Fort Cottage

Ridgeway Lane

Hill Cottages

Plantation

Hill

TRIG STN

F.P.

Scale in Feet.

Fig. 1

Reproduced from the Ordnance Survey Map, with the sanction of the Controller of H.M. Stationery Office

Reference to the Memoir published with the Sheet shows that this formation is not so simple as it sounds, the greensand being (to quote *verbatim*) " covered by a gravelly and clayey deposit made up largely of chalk flints and greensand chert, with, in certain localities, also pebbles of quartz, quartzite and fine grained grit, etc. On the whole, fragments of chert preponderate and the matrix varies from a stiff grey, brown, or reddish clay, to a sandy loam."[3]

It would be hard to find a material less congenial to the excavator. Having removed the mat of bracken and heather roots euphemistically referred to as " turf," after a few inches of humus the fork strikes upon an uneven stratum, roughly 1 foot in depth, of " shattered chert " which, even when previously disturbed and silted back into a ditch, can only be shifted with a pick. Below this is the mixed accumulation of clay and greensand, " the whole partially disturbed, decomposed and rearranged by subærial agents during the glacial period, and showing no sign of stratification " ;[4] so that the lower layers of the ditches are cut in the clay or greensand, between which and the silted material only the closest examination can reveal the separating line.

Scythe stones made from siliceous or cherty accretions found in the upper greensand were formerly made in the district, and the foot of Hembury has been quarried for this material.

WATER SUPPLY.

The supply of water to a camp is always a question of interest. In this case, though no source is to be found within the area, water would not be far to seek. Many excellent springs still issue round the foot of the hill between the greensand and the marl below it, vigorous enough to supply the neighbouring farms and houses without the agency of pumps.

For anyone not too particular there would also possibly be a supply of surface water available in the encircling ditches.

The cutting (IV) at the end of the inner fosse beside the West entrance filled with water to the depth of 1 foot during the week's rain at the beginning of August, which remained undried throughout the subsequent fine weather and the heat wave of early September.

ROADS AND ENTRANCES.

The roads to the Camp have already been fully dealt with by Mr. Sheldon in his admirable book[5] in which he traces an extensive system of ancient trackways dominated by Hembury and linking it directly with Somerset (via Keats Hill and Castle Neroche), Dorchester and the east (via Axminster), Exeter, High Peak, Woodbury, and the estuary of the Exe, thus establishing its connection with all the trade-routes of the time throughout Britain, and with the English and Bristol Channels.

Of the actual approaches and entrances to the fort, there remains, however, something to be said.

The main entrance on the *west side* is the best known. It is clearly marked on the O.S. Sheets, and is undoubtedly original in its passage between the two great encircling ditches ; but the exact point of its ingress to the area of the

[3] " Memoir of Geological Survey for Sheets 326 and 340," p. 67.
[4] Ibid.
[5] G. Sheldon : " From Trackway to Turnpike," p. 21 *et seq.*

Camp still requires proof. Excavation has shown that Wall's version in the " Victoria County History of Devon " is incorrect, and the track marked on the O.S. map is, on the ground, unconvincing.

On the north-west side of the Camp, below the third vallum, runs a magnificent *Hollow Way*, ignored upon all the maps and unreferred to in the standard works. Viewed from above it at first gives the impression of another fosse and vallum but, if followed, it is found to branch from the " Roman Road " (itself probably a contemporary trackway) at the second fence north of Hembury Cross and to run into the modern boundary-bank of the field due north of the Fort 131′ north of its south-east corner. Both these points of contact are discernible on the O.S. six-inch map, and the way shows clearly in the frontispiece (Plate I). A sand-pit working back from the road has obligingly cut through this Hollow Way displaying in section to all who glance upwards from the road, the original hollowing out of the virgin sand (to form the bank beyond it) on which is 0.8′ of stones and rubble beneath 1′ of dirty washed sandy silt. In trimming this face for a photograph (Plate II) two pieces of crudely worked chert were recovered from the silt 0.7′ below the surface.

The beautiful *east entrance*, which carries the roadway into the area of the Fort between 50′ of recurved vallum, is not shown on the O.S. map though it appears in Wall's plan, and is described by most writers in its passage through the inner vallum and fosse, beyond which it has been abandoned to the fate which has overtaken the latter in the planting of Hill Plantation. The present track, which comes in from the north over the third vallum, is clearly not original, and persevering penetration into the dense plantation and August bracken 6′ high, revealed a broad causeway passing between the two ends of the still existing, though sadly mutilated, second ditch, from which traces of a hollow way can be followed obliquely down the hill to the path behind Hembury Cottages, thence joining the roadway which still carries across the valley to Godford Cross, the significant title of Ridgeway Lane.

Examination at a more suitable season might prove the existence of this second fosse all round the east side of the Fort.

No time could be found to survey the east entrance last summer, and it is therefore only approximately indicated on the plan.

The intricate *southern entrance* described in the " Victoria County History " is impossible to identify. The hillside is scored by trodden pathways, by which the visitor of to-day takes the shortest, if most energetic, route to his playground on the summit, none of which bears any semblance of antiquity. The break in the second vallum at this point was probably recently made for the passage of carts.

Of the so-called " Berm " there is equally no trace, as the level section across the eastern ramparts will show (Fig. 2). The slight flattening, which is the natural scarp of the hill, between the artificial slope of the inner vallum and the steep cutting of the ditch, may have suggested this " Platform."

The *Transverse Banks* seem to be a feature unique to this site. The tremendous encircling valla are standard to all camps of this period, but there appears to be no other site in which the area is thus bisected by parallel banks and ditches, also closely associated with the main entrance, and the discovery of the date and purpose of this arrangement is, therefore, of the greatest interest.

Pl. II. Section made by Sandpit through the Hollow Way

Pl. III. Cutting I. Looking South-West

Pl. IV. Looking North along Cutting II. Figures are standing in North and South Ditches. Arrows mark the three Post-holes

In the centre of the southern bank is a Mound, the highest point on the hill, marked on the O.S. map as a Trigonometrical Station with an altitude of 885′ above sea-level. From this point it was possible to plot the cuttings onto the existing O.S. plan and it served also as a datum-point for all the level sections.

No habitations have yet been found, but with the growth of the bracken it was noticed that several patches, mostly circular and about 12′ in diameter, and in two cases more or less rectangular, remained bare amongst the vigorous growth of fern in the north-east of the area. Botanists who have been consulted are unable to account for this curiosity by natural causes, and it is not impossible that these patches indicate the sites of dwellings. Time did not permit of this being put to practical test last season but it seems worthy of investigation.

The work was scheduled and carried out for six weeks from 21st July, six labourers being employed under Mr. W. E. V. Young as foreman. Assistance was given by members of both Societies, who contributed work totalling about ninety working days, and whose acceptance of the utterly dull and disagreeable tasks of removing "turf" or stones, was both courageous and forbearing. It is much to be regretted that work in this soil must inevitably offer so unattractive a choice.

It may interest excavators to know that close observation and constant checking proved that cuttings in this soil definitely shrink when opened (owing, presumably, to the removal of so many cubic feet of supporting material and to trampling round the edges) to the extent of 0.3′ to 0.5′ in 30′ to 80′ cuttings.

The cuttings were dug in spits or layers of 1′. It was impracticable to make charts of each layer as the work progressed, as the soils, unless actually burnt, looked much the same colour when first exposed, and only after drying out for a few days in fair weather did the sections become clear enough to draw and to interpret.

THE EVIDENCE.

The evidence falls into two classes: the Structure and the Finds; the latter consisting of (1) Pottery; (2) Implements and Flakes of Flint and other stone; (3) Sling-stones; (4) Charcoal; (5) Bone, and (6) Metal.

I.—The Structure.

From the investigation of the *Structure* six discoveries were made:

1. The presence of a trench for a Palisade underneath the inner and second encircling valla in the vicinity of the west entrance;
2. The existence of a hitherto unrecorded ditch to the northern transverse bank;
3. The existence of an S-shaped entrance, fortified with post-holes for a barrier, through the southern transverse ditch immediately west of the central mound;
4. Post-holes (part of a system ?) beneath and between both the transverse banks;
5. The impossibility of an entrance (as shown by Wall, Allcroft and the O.S. map) round the western termination of the southern transverse ditch, this continuing into the structure of the encircling vallum; and

6. That the Palisade was earlier, and the transverse banks were later, than the main ramparts. (This is also confirmed by the distribution of the sling-stones).

The evidence from which these facts are deduced, will be given in the detailed account of each cutting.

II. The Finds.

1. Pottery.

The pottery was extremely fragmentary, and though more than sixty separate examples were recovered, many of them can be comfortably accommodated in match-boxes.

Most of the specimens have been inspected by Mr. Reginald Smith and Mr. C. Hawkes, of the British Museum, and Mr. H. St. George Gray, of Taunton, who pronounce them to belong to the Early Iron Age, La Tene II and III, i.e., dating from about 250 B.C. to the beginning of the First Century A.D. One rim and a handle, described below, suggest imported ware or foreign influence.

Seventeen of the fragments found are decorated with incised or burnished lines and are similar in design, paste and workmanship to specimens from the sites at Glastonbury, Meare, Ham Hill, Kingsdown, etc. (Plates XXVII and XXVIII).

Most of the pieces are so small and abraded (and in some cases burnt) that it is difficult to classify them, but those of which there are a sufficient number of samples to justify an attempt at classification, appear to be of four different varieties of paste, which might tentatively be divided as follows :

(*a*) A very coarse clay ware full of large pieces of pounded grit—reddish-buff colour. This stands quite apart and appears to be the oldest type from Hembury.

(*b*) A smoother paste with sparsely distributed grains of grit. The rims of these crudely hand-made vessels are straight and flat (Plates XIV and XVIII)

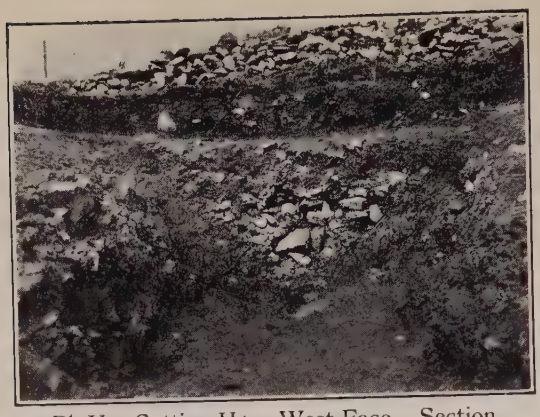
(*c*) A fine gritty paste—dark-or reddish-grey. The sides of the vessels are fairly thick, and they are mostly ornamented with incised scroll patterns in Celtic style, of the Glastonbury type. One small example shows traces of ornament on the base, which is typical of the Lake villages.

(*d*) A finer, less gritty, black paste, highly burnished and frequently ornamented with straight or lattice incised or burnished lines, or with stamped impressions. The rims are small and neatly moulded. This ware resembles vessels from Ham Hill and Kingsdown.

(*x*) Varieties unidentifiable or represented by only small fragments.

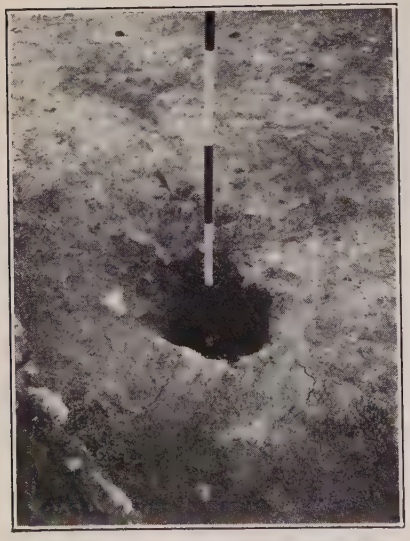
From the bottom of the southern transverse ditch in C.V.b. amongst ashes and charcoal, sufficient fragments were recovered to reconstruct one vessel, P34 (Pl. XXV).

It is a carinated bowl of texture (*d*), 6″ in diameter and $3\frac{3}{4}$″ high, standing on a wide foot. Below the rounded rim are two shallow grooves, the lower decorated with a row of small stamped impressions. Below this line are three pairs of bosses and from between each pair a raised rib runs vertically down the bowl to the limit of the carination. The simplicity of the design is very effective. The idea is evidently derived from the rivets and joints of a metal vessel, such as the Glastonbury and Spettisbury bowls. Its shape is similar to some of the bowls from Jordan Hill (though those in the British Museum have neither bosses nor ribs) and another very similar may be seen

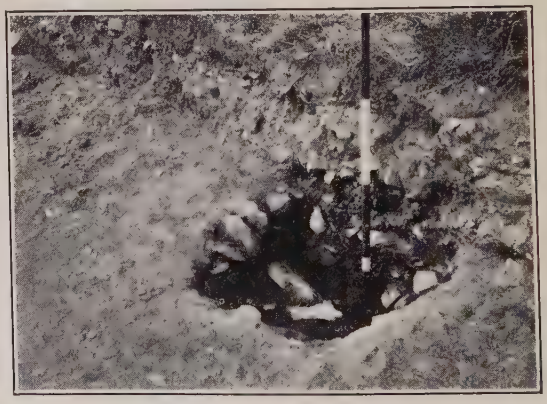


Pl. V. Cutting IIA. West Face. Section through ditch

Pl. VI. Cutting IIB. West Face. Section through ditch

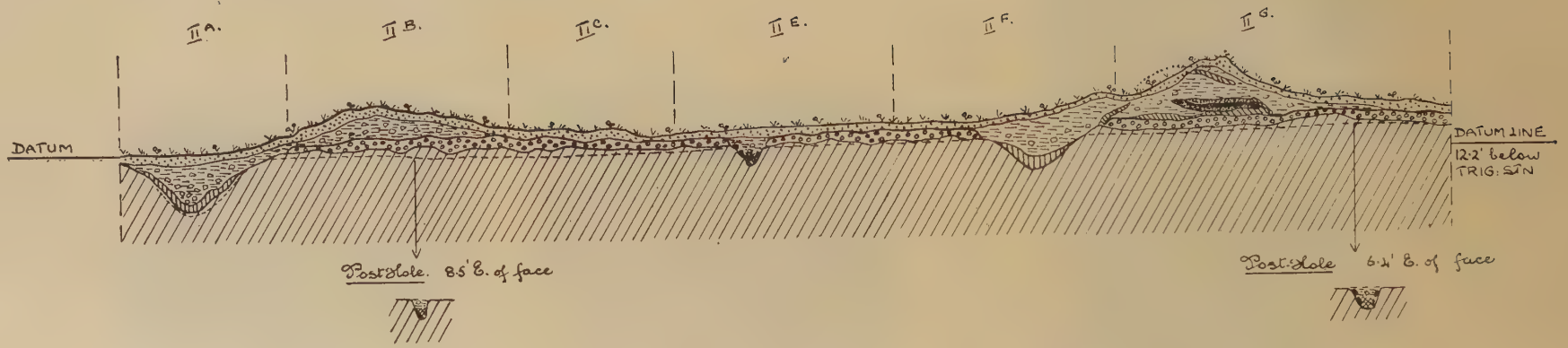


Pl. VII. Cutting IIB. Post-hole 1



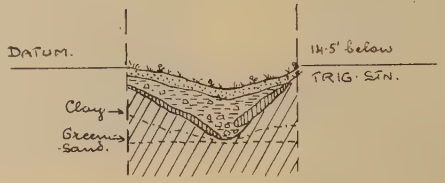
Pl. VIII. Cutting IIE. Post-hole 2. (Note slight disturbance of surface chert)

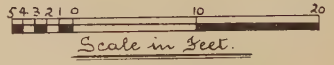
Section along West face of CUTTING II.



Section through South face of CUTTING I.

Section through East face of CUTTING III.





HP '30.

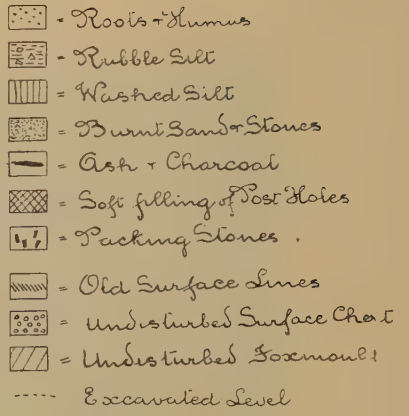


Fig. 3

Pl. IX. Cuttings II F and G. Northern Ditch and Bank

Pl. X. Cutting IIG. Post-hole 3. 17 stones from the hole piled in background

Pl. XI. Cutting IIF. West Face. Section through ditch

Pl. XII. Cutting IIG. West Face. Section through bank

in Taunton Castle. Mr. Gray states that there was a small fragment from Ham Hill with only one of the bosses remaining (the others apparently broken off), and another piece of a black bowl of Jordan Hill type from the same site had vertical ribbings but no bosses.

Associated with this bowl were found :

1. A piece of burnished undecorated black vessel (*d*) with a bead rim, which Mr. Gray believes to be the furthest west the bead rim has yet occurred in South-West Britain (P11, Pl. XXVIII).

2. Part of a rim of a thin lathe-turned olla (P27, Pl. XXVIII) of fine black pottery with out-bent rim and gracefully moulded neck, and a high shoulder. There is a slightly hollowed groove where the shoulder joins the neck, and another lower gives the suggestion of a cordon. According to Mr. Gray this vessel is apparently of the Claudian-Nero period and it *may* have been imported. (It is similar to P31 from Kingsdown Camp[6] but the Kingsdown specimen is somewhat more exaggerated than is usual in the type).

3. A base (with part of sides) having a groove round the circumference on the under-surface (P26, Pl. XXVIII). This may belong to the vessel with the rim described above.

In the inner fosse (C. IVa, Layer 4) there was a handle of very soft red clay resembling an " amphora " handle (P35). Mr. Smith expressed the opinion that while the form is possibly copied from an imported jar, this specimen is undoubtedly inferior and of British workmanship.

2. Objects of Stone.

The *Flint* finds were numerous, and in addition to over 1,300 flakes and 130 implements of flint, 19 chert implements and 8 objects of other stone, were found.

Nearly all the flint was imported to the site, that from the clay which is indigenous to Hembury being unsuitable for chipping. Most of the implements are of dark mottled grey or black flint, obtainable from the Beer district twelve miles to the south-east and several of the arrowheads are of a fine translucent creamy-brown flint which can be found a few miles to the north of the Fort. (No. 166 is a larger example of this quality of flint).

Of the implements, 64 are scrapers and 20 arrowheads (or fragments thereof). The remainder includes cores (some used as choppers) ; hammer-stones ; choppers ; knives ; planes ; beaked, piercing and prismatic implements ; and some combined tools.

A detailed description of each is given in the List of Implements.[7] All the flakes found have been kept in bags labelled with the number of their cutting and layer.

Specimens, Nos. 2 and 95, have an unusual dark slate-blue patina.

No. 141 is a flake from the surface of a polished celt (showing part of the ground edge) of white patinated flint.

A " pigmy " scraper, No. 116, was found in C. IIIb. and is supported by five pigmy flakes from Layer 2 and one from Layer 6 of C. IV. Another similar scraper picked up on the roadway between these two cuttings, has been numbered 170.

[6] " Archæologia LXXX." (Will be published March, 1931).

[7] Mr. C. Hawkes, to whom a number of the flints were shown, pointed out their similarity in type and workmanship to those occurring in a camp of the same date at Loughton in Essex.

The presence in the cuttings of pieces of twenty arrowheads (all but two unfortunately broken) of which all of identifiable shape (twelve in number) are of the " leaf " or " lozenge " types which technically represent the Neolithic period, is extremely interesting.

In this quantity, definitely associated with the scrapers, flakes and pottery, and unsupported (as yet) by any Neolithic remains, it seems impossible summarily to dismiss them as belonging to a previous occupation and people, and left lying on the surface before the advent of the Celtic settlers of the Early Iron Age. Were this the case they should be most abundant on the old surface line beneath the vallum, and in the lowest layer of the vallum where the turf from the ditch has been thrown, and most rare in the silt of the ditch. Reference to the Table (p. 20) shows that at Hembury they were not so distributed.

Two cases of cores found together with flakes of similar flint and cortex, near the bottom of the ditches (C. IV, No. 92 and C. IIIb, No. 118) point to chipping being carried on at Hembury when these ditches were open. If (as is now generally admitted) the flakes and scrapers may be accepted as contemporary in these Early Iron Age sites, it seems scarcely reasonable to dissociate the arrow-heads entirely from them.

One such arrow-head was found at the Glastonbury Lake Village[8] and I learn from Mr. St. George Gray that several of " leaf " and " lozenge " shape have occurred at Meare (one made from a flake struck from the surface of a polished celt) together with one " barbed " and " tanged ".

Their appearance in these numbers and with such definite associations, may call for some readjustment of the theory that these forms, on being superseded by the " barbed " and " tanged " types, made their final bow to civilisation in Britain.

CHERT.

The chert artefacts include 1 well made scraper (No. 153) of reddish greensand chert ; 5 flakes with indifferent working (Nos. 30, 102, 104, 150 and 151) ; 6 rough pieces (not flakes) crudely chipped (Nos. 99, 109, 123, 124, 125 and 167) ; a large core used as a hammer-stone (No. 161) ; an unwieldy chopper (No. 138) ; and a primitive and unusual series of naturally fractured " Pot-lids " (Nos. 103, 113, 114, 139 and 140) which have been used as choppers and three of which show a typical reversed " S "-shaped chopping profile.

SANDSTONE.

Two roughly circular (actually hexagonal) flat discs were found about 2.3″ in diamter (Pl. XXVI)—one in C. Vb, and one in the trench for the Palisade in C. IVc.

The former (No. 156) is perforated through the centre with a neatly countersunk hole. The second (No. 100) has no perforation. A rubber (No. 157) 5.45″ in length and oval in section, also occured in C. Vb.

Dr. Thomas is of the opinion that this stone is either Corallion (in which case it must be imported from eastward of Axminster) or local greensand. It is unusually micaceous.

QUARTZITE

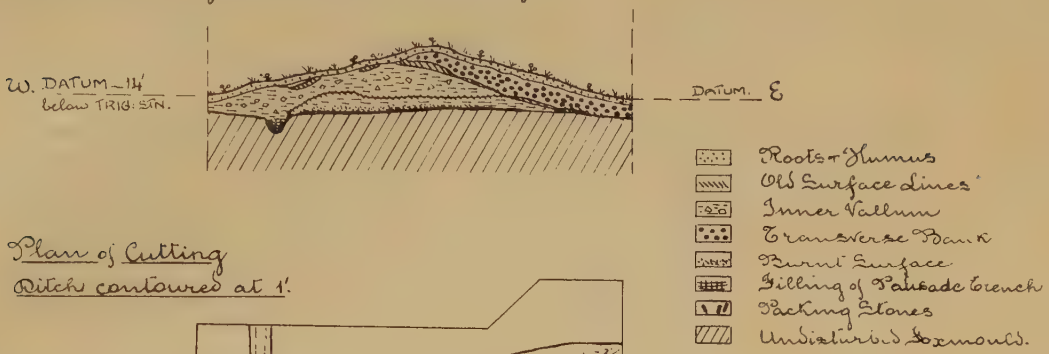
A small and perfect celt ground from a fine-grained quartzite pebble came from C III (No. 3). From C IIIb. came a similarly shaped flat pebble

[8] " The Glastonbury Lake Village," Bulleid & Gray. Vol. II, pp. 603-606.

Fig. 4

Cutting III B.

Section along North face of Cutting

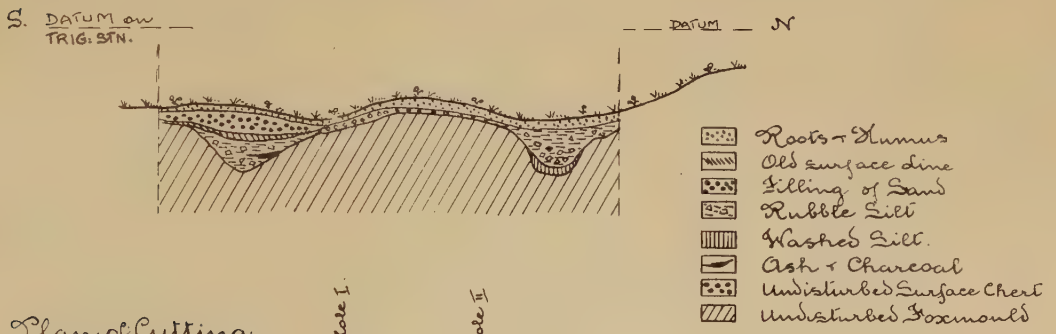


Plan of Cutting

Ditch contoured at 1'.

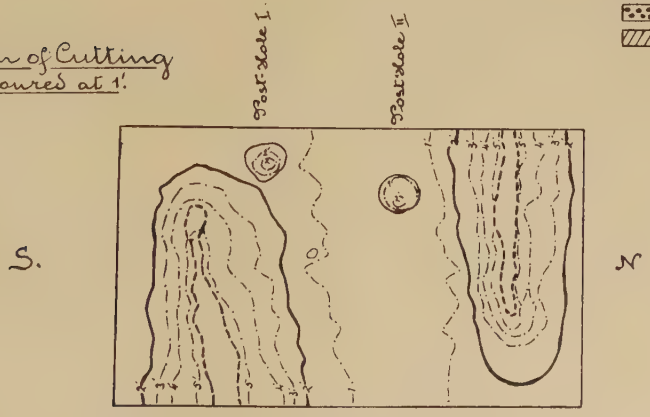
Cutting V.

Section S. + N. at 10' W. of E. edge.

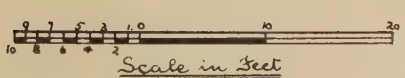


Plan of Cutting

contoured at 1'.



HP '30.



(No. 101) and a lump of reddish quartzite (No. 122) both used as honing-stones. A piece of a rubber of the same material came from C IIb. (No. 30).

The butt end of what must have been a very large celt was found in C VII. This is of *Hornblende Schist* (altered Dolerite) which might be found near the granites of Dartmoor, or along the south coast of Devon and Cornwall west of the Exe. This fragment measures 6.2″ in length, and shows signs of much rubbing from hafting immediately behind the fracture.

3. Sling-Stones.

Of the quantities of pebbles which were found throughout the excavation, the most noticeable characteristic was their uniformity of size. A selection was forwarded to Dr. H. H. Thomas, which, he stated, included pebbles of jasper, quartzite (Gres de Mai, or some other ancient quartzite from Armorica) and cretaceous chert (greensand). Dr. Thomas continues that the first two species " could be, and probably were, derived from the Bunter Pebble Beds that outcrop to the west and north (Newton Poppleford, etc.) and the other from the remnants of Eocene formation that occur locally. I think that all the pebbles could be obtained on, or within a short distance of the hill ; but the mixture of Bunter and later pebbles suggests to me that a human selection has been made, especially as you say the size is more or less uniform. I should say, therefore, that you have at Hembury a series of pebbles of more or less local origin, but selected as regards size and concentrated by human agency. The idea of sling-stones seems perfectly reasonable, though, of course, incapable of absolute proof. I should back it myself."

There is, however, some proof of their purpose in the occurrence of identical pebbles, together with baked clay sling-pellets of similar weight and size, at Ham Hill and elsewhere.

Those at Hembury averaged about two ounces in weight. One small " nest " was found of ten carefully chosen pebbles weighing less than one ounce each, which have been preserved (No. 50). Two other " hoards " of between 40 and 50 pebbles occurred in C IIf and C IIIb.

The distribution of these pebbles, of which 1,188 were collected, is significant. None were found under, nor in the core of, the inner and second encircling valla : the 8 which occurred in the cutting through the former, and the 2 in the latter, being found on the surface in the turf. Under and throughout all layers of the transverse banks the pebbles abounded, pointing to the probability that whatever affray caused them to be scattered in such numbers over the area, occurred *after* the encircling valla were built and *before* the erection of the transverse banks. In C II the number collected increased steadily as the cutting was driven northwards : C IIa (S. ditch) producing 12, C IIb (S. bank) 43, C IIc 74, C IIe 89, C IIf (N. ditch) 183, and C IIg (N. bank) 397.

A very few larger pebbles were found, and a good many pieces of stones which must have averaged about 4″ or 5″ in diameter and were flattened rather than spherical. All of these were broken.

(At the close of the excavation all the sling-pebbles which were not required for museums, were buried in Post-hole 3, C IIg).

4. Charcoal.

Nearly all the fragments of charcoal found during the season were submitted for identification to Mr. J. C. Maby, who, after specially treating some

twenty of the specimens for sectioning and microscopic examination, reports the presence of the following genera of wood :

Acer sp. (Maple, Sycamore or Plane).
Betula sp. (Birch).
Corylus sp. (Hazel).
Alnus sp. (Alder).
Crataegus sp. (Hawthorn).
Fagus sp. (Beech).
Prunus sp. (Cherry and Plum).
Pyrus sp. (Apple, Pear Rowan, White Beam, Wild Service, True Service, Medlar).
Quercus sp. (Common Oak).
Fraxinus sp. (Ash).
Ulex sp. (Gorse).
Quercus Ilex ? or *Lonicera* (Evergreen Oak or Honeysuckle) (?)
Populus or *Salix sp.* (Poplar or Willow).
Ilex sp. ? (Holly).
Sambucus sp. ? (Elder).

"*Note :*—The above genera appeared to be fairly uniformly and generally distributed through the 29 sample lots received for examination.

The Latin genus has been given in respect of each sample, while the most likely English species are given in brackets immediately following. But it must be carefully noted that no exact species can be safely stated, as the wood structure of different species belonging to the same genus is, in most cases, very nearly identical, and but rarely ascertainable from charcoal specimens."

Samples of soil from the turf-lines beneath the valla and from the Palisade trenches and post-holes, were also forwarded to Mr. Maby who states that in each soil sample submitted " Soluble humus " was plentiful (" . . the presence of soluble humus may, in general, be accepted as evidence of a soil having at sometime supported a vegetation ; especially when such evidence is backed up by the presence of many fine particles of decomposed, or decomposing, organic matter (charcoal excluded)—as in the present instances—or when the quantity of soluble humus is relatively great—as also in the present instances) . . . and the microscopic appearance of the soils also suggests the presence of a certain amount of decayed organic matter (apparently vegetable) such as one might expect to find in an old turf layer.

" Each soil also contained a greater or lesser proportion of fine charcoal dust, as well as some larger fragments, some of which may have come from woody shrubs and stems, such as gorse (?) but a few of which were apparently oak charcoals (See Lots 20, 22 and 28). Some kind of fire, was, therefore, involved."

Some of the analyses are quoted verbatim with the details of the cuttings. (See below).

(Mr. Maby's complete report, which is too long for transcription, is forwarded with this report to the Joint Committee).

5. Bone.

Gravel and sand soils being inimical to the preservation of bone, it was surprising to find even one tiny fragment which occurred at the bottom of

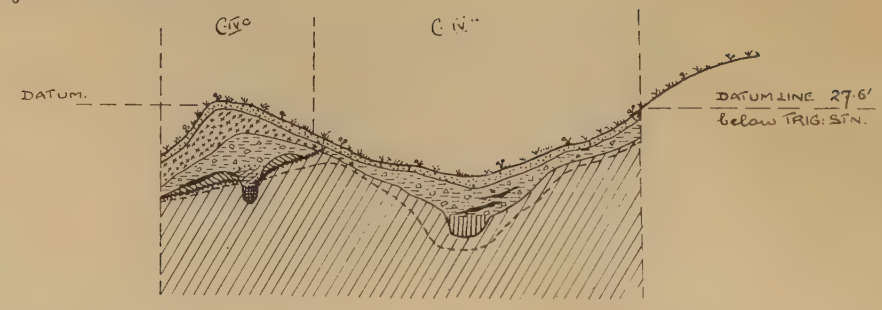
Pl. XIII. Cutting III. East Face. Section through ditch

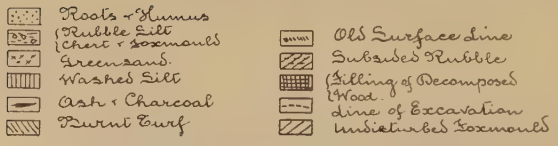
Pl. XIV. Cutting IIIB. Looking West. End of ditch in foreground, shallow depression, palisade trench and post-holes beyond. (Below the line of dots is the "trampled" surface line separating the grey vallum from the yellow transverse bank)

Pl.XV. Cutting IIIB. Palisade trench with "bridge" and packing-stones "in situ." Post-holes on right

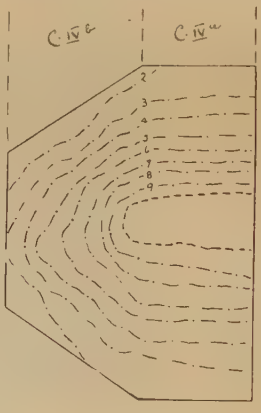
CUTTING IV.

Section along North face of Cuttings IV A-C.

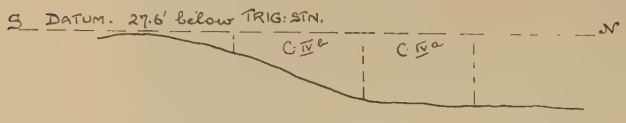




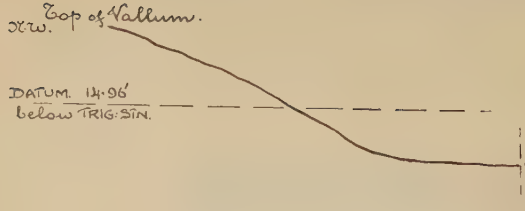
Plan of S. end of Josse contoured at 1'.



Level Section S.-N. along Josse at centre of Cuttings IV A-B.

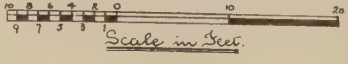


CUTTING VII.



Level Sections N.W. - S.E. of Cutting VII on the line extended from the S.W. margin of that Cutting

C. VII. continues 80' S.E. with a rise of 1·2'.



D '30

the ditch in C IIf. When found it was of the consistency of cheese and on drying crumbled into splinters. Professor Watson kindly inspected it and states that it is really not identifiable, but is possibly part of a scapula of a small sheep.

6. Metal.

Part of a bronze ring which has been burnt, came from C VIIa. It is double in section and of Iron Age type.

The Excavation.

The cuttings were seven in number. Nos. I, VI and VII, questing for habitations, produced purely negative evidence. Nos. II, III and V were through the transverse ditches and banks (III also penetrating the inner encircling rampart) and IV through the great fosse and second vallum north of the west entrance. (Plan : Fig. 1).

Cutting I. 20′ x 20′ (Pl. III and Fig. 3).

Cutting I was to determine the nature of a segment of bank in the southern half of the area prominently marked on the map in the " Victoria County History of Devon," and described therein as " a circular platform 3′ high, with a shallow ditch on the east side, which may possibly have been the site of the chieftain's hut."

The bank was unconvincing, as, although the eastern segment is good, and steep enough to suggest even masonry foundations, on the south and west it fades away into the contour of the ground, as if the semblance of an artificial bank had been left by the digging of a small depression westward of it.

This proved to be the case. The cutting displays two sections of the " Bank " which is 12′ wide at its base, 4′ at its gently rounded top and 2′ high, and shows, beneath 0.6′ of heather roots and humus, 0.6′ of fox-mould thrown up from the depression on the west side, and beneath that the line of surface chert upon the undisturbed fox-mould. In the peaty humus were a few flakes. (See Table p. 20).

The depression was probably made testing for scythe-stones.

Cutting II.

Cutting II was 120′ long and 12′ wide through both transverse banks and ditches, and the space between them, with an extension (II d) 18′ x 15′ eastwards at right angles, along the southern ditch. (Pl. 4 and Fig. 3).

The purpose of this great cutting was fourfold :

1. Investigation of the southern ditch.
2. To obtain sections of the composition of, and if possible, finds to date, the two banks.
3. To discover the purpose of the area between ; and
4. To test the statement made in the " County History " (p. 587) that " the northern bank, 5′ high, has no ditch." If this were true, to find whence the material for this bank had been collected and why, since it is easier to build a bank with a ditch, this trouble had been taken to avoid making one.

The eastern side was chosen as presenting the best section of undamaged banks, and offering the most sheltered area for possible dwellings between them.

Cuttings IIa and IId. 30′ x 15′. The Southern Ditch.

The eastern half of the southern ditch is peculiar in presenting on the surface, a series of pit-like depressions, each about 12′ in diameter and divided by higher ridges or causeways (Fig. 6) unlike that west of the Trigonometrical Station which has silted up uniformly and smoothly. C IIa and d. were therefore excavated in three parts in order to obtain sections through both depressions and " causeways ".

No explanation could be found for this formation, beyond the uneven silting back of the stones. All sections were equally stony though the stones in the " causeways " were larger. There was no indication that this was anything but accidental, and the depressions had not been dug subsequent to the silting of the ditch.

The section (Pl. V and Fig. 3) shows the ditch to have been originally a wide rounded U shape, 9′ to 10′ in width at the top, 2′ at the bottom, and 4.7′ to 5.4′ deep below the present turf level.

The original bottom is marked by a line of dusty, puddled sand, 0.2′ in depth[9] upon which is a layer of washed silt (clay mixed with dust, grains of charcoal, etc.) varying in the three sections from 0.5′ to 1.5′ in thickness and solidified to a cement-like hardness. This came steeply off the shoulder on the north side, and piled up on the south side before the inrush of rubble silt from the collapsing vallum completed the infilling.

The quantity of stones in the centre of the ditch suggests that the vallum may have been faced on this side with a rough retaining wall of chert, similar to that used during the excavation to hold up the " talus " (see illustrations).

This ditch when open and reinforced by the vallum, would present no mean obstacle. The finds include (see table) 1 arrow-head and 15 scrapers. The flakes and scrapers were most numerous on the shoulder of the ditch at a depth of about 2.6′ and *upon* the washed-silt layer as well as beneath it, on the dark line of the original bottom.

Some La Tene II pottery came from the edge of the washed-silt, almost at the bottom.

Cutting IIb. 20′ x 12′. Through the Southern Bank.

The section (Pl. VI) shows the vallum to stand now at most 3.2′ above the original surface level; when newly built it must have been twice this height. Beneath the roots and humus the core of the bank is of fox-mould and chert, underneath which the old turf line is easily distinguishable, soft and dusty, and containing a certain amount of charcoal, and flakes and pottery at intervals.

The presence on this old turf-line of La Tene II pottery, is evidence that this bank cannot andedate that period.

The greatest number of implements was near the top of the vallum in layer 2—pottery occurred in all layers. (See Table, p. 20).

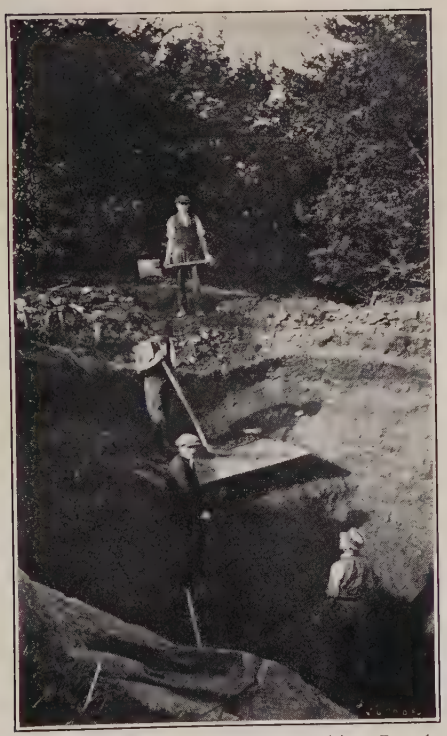
Post Hole No. 1.

Beneath the centre of the vallum is a small post hole (No. 1) slightly oval in shape, measuring 1.45′ (S.E. and N.W.) x 1.2′ at the top, strong, regular sides narrowing to a diameter of 0.9′ at bottom, 1.8′ deep.

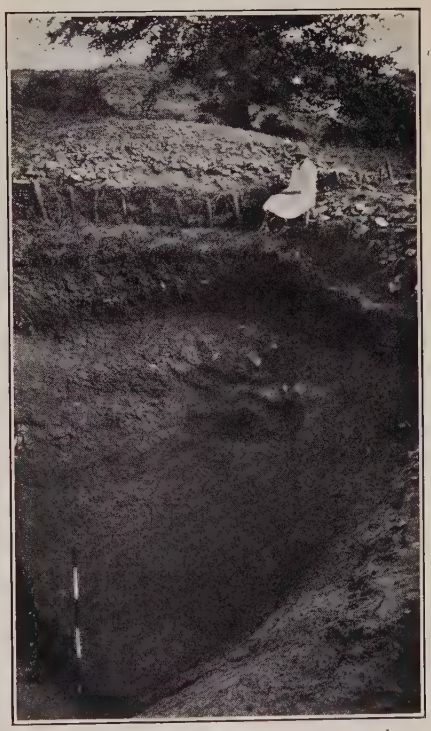
The difference in the silt was clearly marked, showing grey and earthy against the yellow fox-mould. It was loosely packed and came away easily

[9] An identical " puddled " line marked the bottom of the ditch (in gravel and sand) at Chilworth Ring, Hants, excavated by D.M.L. in 1928.

Pl. XVI. Cutting IV. looking South-East. Before excavation



Pl. XVII. Cutting IVB. Looking South-West during excavation



Pl. XVIII. Cutting IVB. Same view as Pl. XVI. excavated end of Inner Fosse

from the solid sides, and contained grains of charcoal throughout, also two fragments of charcoal and one flake. (Pl. VII).

Cuttings IIc. 15′ x 12′ and IIe 20′ x 12′. Across the Area.

Throughout this stretch, below 0.6′ to 1′ of humus, was encountered the stratum of " shattered chert ". The cutting was taken to a depth of 2′ into this undisturbed matrix. A small patch of charcoal and ash extending over a space 1.9′ x 1.2′ occurred at the south end of the cutting, and with it a fragment of unburnished pottery (*c*) and 1 flake.

Post Hole No. 2.

Halfway across the area, at 5.5′ from the south-west corner of IIe, against the western margin, another post hole (No. 2) was located through the slight disturbance of the surface chert above it. It extends 2′ in diameter from the face of the cutting and its depth is 1.6′ below the excavated level and 3.3′ below the turf. Large packing stones leave a diameter at the bottom of 0.7′.

A sample of the filling was sent for analysis (Charcoal report 28) and is reported to be " a fine sandy soil containing several small fragments of *charcoal* (possibly Common Oak ?), too coaly and brittle to section for identification. Also about 2—5 per cent. (say) of *fine Charcoal*, intermixed with the soil ; but no rootlets or other vegetable remains observed. *Soluble humus* was found to be very plentiful."

In layer 2 of IIe was a " nest " of 10 small beautifully matched sling-stones, uniform in shape and weight (all between ¾-oz. and 1-oz., and totalling 9-ozs.) and evidently carefully selected. These have been kept. (No. 50).

Cutting IIf. 20′ x 12′. The Northern Ditch.

No trace of this ditch is visible on the surface, the vallum, on the contrary, having a sort of shelf or berm which completely disguises its contour.

The first and second layers were replete with roots and stones as in the previous stretch ; they produced an increased number of slingstones, 91 being recovered from layer 2. From 2′ to 3′ below the turf a break in the band of surface chert was apparent in the face of the cutting, indicating the presence of the ditch.

The removal of another spit showed the difference in colour of the silting, which was of fine brown, sandy mould. It contained hardly any large stones and fell away cleanly from the sides of the ditch. (The photographs of this section (Pl. XI) and that through the southern ditch (Pl. V) should be compared). The ditch measures 11′ wide at top and 1′ at bottom, and 3.3′ deep, and the washed-silt at the bottom was muddy, and not hard as in the southern ditch. Pottery, flakes and sling-pebbles occurred throughout and included another compact heap of 9 sling pebbles, uniform in size and weight, close to the northern edge of the ditch in layer 3.

Cutting II g. 30′ x 12′. The Northern Vallum.

The composition of this vallum differs markedly from that of the southern bank, being of soft sand with very few stones. At 3′ to 4′ below its summit (1.3′ above the original turfline) were signs of a large fire. (Ch. report 6 and 7). The central portion consisted of a quantity of calcined chert and ashes, measuring 5.6′ x 2.6′ and 0.3′ in depth. The black layer surrounding the hearth however, extended over the whole area to a depth of 1′, and shows

in section in both faces of the cutting. Three unburnt flakes, one burnt flake, a fragment of La Tene II pottery, and two unburnt sling-pebbles were found on the hearth, also a fragment of a large quartzite pebble possibly used as a rubber (No. 30). Forty-five unburnt sling-pebbles were found in a heap on the north-west side of the hearth.

Pottery occurred all over this layer, among and below the ashes, 21 assorted fragments being found together at the south edge of the vallum.[10] The first 1′ or 2′ of soil had already been thrown up from the ditch before the conflagration took place, almost as if, on the conclusion of day's labour, the workers had settled round their fire for a rest and a meal.

Sling-stones still increase in number, layer 3 providing 207.

The Section (Pl. XII, and Fig. 3) is rather complicated. In it two old turf-lines show clearly; that immediately beneath the fire is reduced to a substance resembling silver grey sand. There is also visible as a line of dark mould in the grey or yellow sand, a turf-line which appears to define an intermediate contour of the bank, though the ditch must have been, at any rate partially, silted up before this growth took place. Later, the vallum was heightened by digging material from the south, throwing it on to the north side of the summit.

The absence of a retaining wall of stones might account for the complete disappearance of this ditch.

Post Hole. No. 3.

North of the vallum, almost in the centre of the cutting, is post hole No. 3 which showed as a circle of fine earthy mould on the yellow fox-mould surface. It was packed round with 17 flat stones set on edge and contained a piece of pottery, 6 sling pebbles, 4 flakes and some charcoal. (Prunus sp. cherry or plum: Ch. report 8). The hole is well shaped. Diameter at top 2.6′, bottom 1.3′, depth 1.7′.

These post holes must be part of a system of defences, probably in use prior to the banks, and extensions east and west from post holes 2 and 3 would be interesting to see if, and at what intervals, they recur.

Cutting III.

This cutting, 30′ x 14′, was opened to ascertain the dimensions of this half of the southern ditch, and in search of its western termination, to prove the presence, or otherwise, of an entrance round it as shown in Wall's, Allcroft's and the O.S. plans.

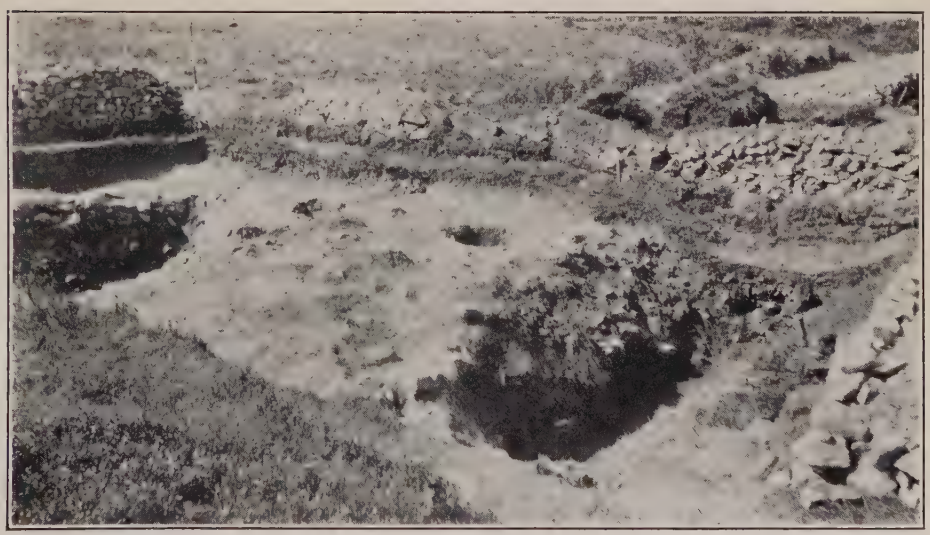
At the western end the line of the surface was very deceptive, and the actual termination was only found in C IIIb, 15′ further west.

Little of interest was found in this stretch. In layer 2 the filling was of yellow fox-mould and stones, and at 4′—5.6′ from the east end, was a patch of charcoal which continued, increasing to 6′ in diameter, through the successive layers to the bottom of the ditch (Ch. report 9, 10, 11, 12). Five small flakes were near it. A second burnt patch containing coarse grains of charcoal and grey sand was in the centre of the cutting, and several isolated

[10] Beneath this pottery at the extreme southern margin of the cutting, the ground was "salted" by the insertion of an implement known as a "Tiger's Claw," used upon the Northern frontiers of India. It bore traces of one night's rust and did not prove very distracting. It has not since been claimed by the misguided owner and has been kept by the excavator as a "perquisite."

Pl. XIX. Cutting IV. looking North-West. Section through Fosse (IVA) and second vallum (IVc)

Pl. XX. Cutting IVc. North Face. Section through vallum and Palisade trench. (Note break in dark turf line and subsidence of Vallum above trench)



Pl. XXI. Cutting V. Looking South West over C J. Showing end of ditches and post holes

pieces of very fine grained charcoal occurred throughout one layer. The small ground quartzite celt (No. 3) was found in this layer.

In layer 3 was a mass of boulders, in parts loosely piled in the centre of the ditch, through which water had percolated freely, washing out the intervening soil and leaving around them a deposit of sticky yellow clay. At the eastern margin was found a base and part of the side of a vessel of hard burnished black ware (*d*) P19, and three arrowheads occurred in the layer.

Layer 4 penetrated the washed silt which denotes the bottom of the ditch, a mixture of clay and sand impregnated with dust and flecks of charcoal.

9′ from the east, in the centre of the cutting, was a quantity of charcoal and burnt sandstone 1′ deep and covering an extent of 4′—with it were six flakes and a tiny quartzite pebble. A piece of pottery and a fragment of La Tene II rim were found at a depth of 3.7′.

To eliminate any doubts as to the correct outline of the ditch in this confusing soil, a trench 3′ wide was cut into the undisturbed sides of the ditch at the east end, leaving the section absolutely clear. (Pl. XIII and Fig. 3).

This section shows the undisturbed matrix to be of sand beneath a band of natural clay. There is a clearly defined washed silt, of clay mixed with dust, etc., on both sides, 0.5′ deep on the north and a little deeper on the south. A small fall of rubble has filled the bottom of the ditch before this washed layer was completed.[11] The ditch has then filled in in the ordinary manner.

Cutting III b is a continuation westward of III. It is carried up to the encircling inner vallum at a width of 14′ x 11′ (a bridge 4′ wide being left between the two cuttings for the footpath) and through the vallum for 20′ at a decreased width of 10′.

This strikes the complicated meeting place of the transverse and encircling banks. The result was extremely interesting.

The Ditch was followed up to, and actually into the structure of, the encircling vallum out of which its narrow, shallow, rounded end had been dug, clearly showing that the ditch was made subsequent to the erection of this vallum. This deduction is supported by the evidence of the section (Pl. XIV, and Fig. 4) which shows the encircling rampart to be made of dusty material scraped from the surface and having above it a trampled surface-line beneath the transverse bank, which overlaps it, and is composed of yellow fox-mould thrown up from the ditch. The silt in the ditch was of this latter material.

The upper layers of the ditch were more tightly packed with stones than any other cutting.

Around the ditch the old surface-line is represented by a burnt layer of gritty soil and cracklings of flint, and an unprecedented quantity of flakes were found all over it. A " hoard " of 50 sling-pebbles were piled in layer 2 against the north edge of the cutting in such a manner as to suggest that they could not have retained this position unless enclosed in a bag or skin when dropped there. The average weight of these was 2-ozs. Four rough chert implements, 2 arrows and 3 beautiful scrapers came from the ditch, and at a depth of 3.7′ a tiny core with 10 flakes of similar flint were found together in the centre of the ditch (No. 118).

The bottom layer of the ditch was a paste of washed clay, accounted for

[11] This is paralleled at Chilworth Ring.

by the drainage of water, as there is a drop of 10′ from the east end of this ditch in the centre of the Fort.

Underneath the main vallum, beyond the end of the transverse ditch, *two* old surfaces can be traced. The lower is of decomposed turf, dark and earthy, and 0.5′ below this were found two shallow depressions, roughly oval in shape, measuring 1.5′ x 1′ in diameter and containing a quantity of very friable, reddish-buff pottery of type (*a*). (Similar depressions were found at Ham Hill, apparently scooped out to accommodate a pot and frequently containing the crushed base of a vessel). Around these depressions the ground was burnt and gritty, and flakes and scrapers abounded.

One foot above this is the upper surface-line, of a gritty, weathered material, such as might result from constant trampling on a stony surface unprotected by turf, and identical with that which defines the outline of this vallum beneath the transverse bank.

Thirteen feet westward from the end of the ditch, and still beneath 3′ of vallum, a socket-trench for a *Palisade* runs north and south ; and beyond it three rough post holes curving round the corner of the cutting, hold promise of interest yet to come on the broad platform between this vallum and the great main fosse. They might possibly belong to the outer wall of a habitation. (Pl. XV).

Twenty-two implements came from all layers of the inner vallum, but no sling-stones were found in its composition. Only two occurred in all four layers, both in the growing turf.

THE PALISADE TRENCH.

(Reference to the plan and section (Fig. 4) will greatly elucidate the description).

The trench measures 1.85′ at the top and 0.5′ at the bottom and is 2.7′ deep. Its presence was only detected by the subsidence, visible in the face of the cutting, of the stratum of the vallum immediately above it. The old weathered surface-line curves down to meet the edge of the trench.

The filling for a depth of 0.7′, was of the subsided vallum and contained no charcoal. From 0.7′ to the bottom was soft, brown, sandy mould, with tiny grains of charcoal throughout. The report on the sample (Ch. report 13) states this to be " a fine sandy soil containing two or three very small fragments of *charcoal* (Oak ?) ; also plenty of finely divided dust ; also certain minute fragments resembling decayed plant remains (possibly roots, etc.). . . . Soluble humus was found to be plentiful."

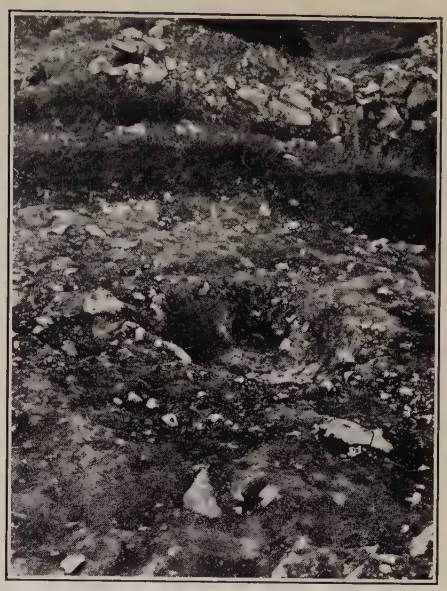
The sides of the trench were lined with flat packing stones, more or less uniform in size : 1′ x 0.9′. Six of these remain *in situ*, though, as they have collapsed towards the centre with the shrinkage of the contents, two round stones have rolled in behind them. Near the southern margin a tiny " bridge " of undisturbed matrix is left across the trench ; beyond this is another packing stone in place. The dark filling came away easily from the firm unweathered sides. In it were seven flakes, two burnt pieces of flint and some charcoal and a small fragment of pottery type (*a*) occurred on the bottom.

Around the Palisade and post-holes were 8 implements.

THE POST HOLES.

The position of the post holes can best be seen on the plan (Fig. 4). Their maximum depth is No. 1, 3′ ; No. 2, 3.4′ ; No. 3, 3.1′. There was no pottery

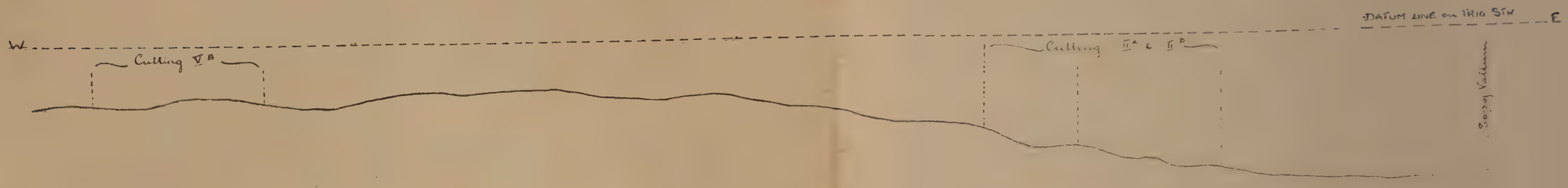
Pl. XXII. Cutting V. Post-hole 1



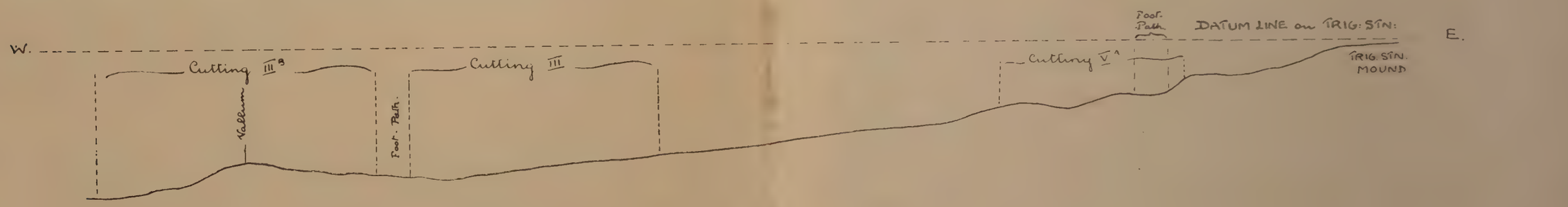
Pl. XXIII. Cutting V. Post-hole 2

Pl. XXIV. Cutting VII. looking North-East. Bracken in right foreground marks the recurved vallum at east entrance).

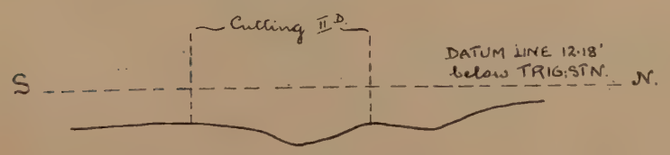
Level Section W. to E. along E. half of Southern Transverse Ditch through Cuttings $\overline{V}^B$, $\overline{II}^A$ & $\overline{II}^D$ Line D — D on Plan



Level Section W. to E. along W. half of Southern Transverse Ditch through Cuttings $\overline{III}^B$, $\overline{III}$ & $\overline{V}^A$ Line C — C on Plan

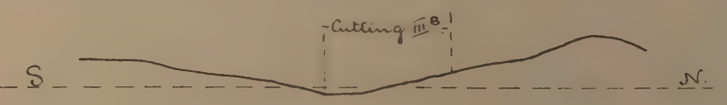


Across C. $\overline{II}^D$. S. to N. at 10' from E. edge.

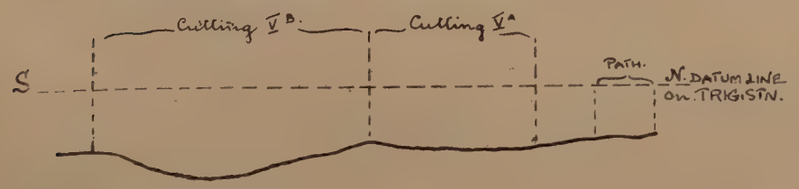


Across C. $\overline{III}$ S. to N. at 10' from W. edge.

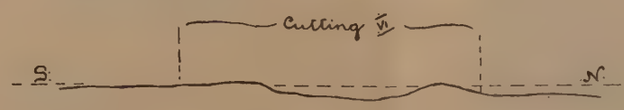
Across C. $\overline{III}^B$ S. to N. at 11' W of "Bridge".



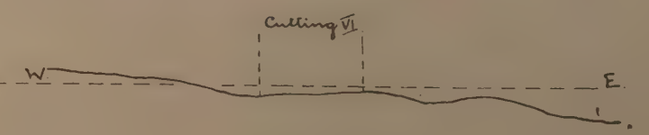
Across C. $\overline{V}$. S. to N. at E. edge.



Along W. edge of C. $\overline{VI}$. S. to N.



Across centre of C. $\overline{VI}$. W. to E.



J.P. '30.

in No. 1, but several fragments (all type *a*) in Nos. 2 (one piece on the bottom) and 3. The filling was very soft and black, and the sample analysed from post hole 2 contained " several fragments from either a stem or large branch of *Quercus sp.* (Common Oak), not less than 6" in diameter." (Ch. report 14).

This corner was the last to be excavated (the post holes were only cleared within an hour of closing down the season's work) and would be the first to merit further exploration. In hopes that the opportunity may not be very long delayed, the trench and post holes were carefully packed with fern before refilling, that they may suffer the least possible damage in re-excavation.

Cutting IV. The Inner Fosse and 2nd Vallum.

The object of this cutting was (1) by clearing the end of the fosse just north of the main west entrance, to establish this entrance as original ; (2) to ascertain the depth and form of the great fosse ; (3) to make a cutting through the 2nd vallum.

The soil was so confusing that it was thought wise to obtain a section first on the north side of the cutting (IVa) and then follow the contour of the ditch as shown therein (IVb). This scheme proved satisfactory, though causing additional labour, as the filling removed from IVb had all to be thrown up on to the slope of the vallum, necessitating a quadruple throw for each shovelful. (Pl. XVI, XVII and XVIII).

Cuttings IVa 30′ (E. and W.) x 10′. IVb (14′ S. of IVa narrowing from 30′ to 14′ wide).

The actual excavation of the fosse was sheer " hard labour " and supremely dull.

Layers 1 and 2 were softer humus than within the area and contained a few flakes, implements and sling-pebbles. In layer 3 the stones reappeared. There was a large patch of charcoal, irregularly disposed, beneath which was a small piece of modern glazed pottery. At a depth of 3′ was found the red-clay handle referred to on page 6. There were three arrow-heads in this layer. The sides of the fosse down to this level were of clay and below this of greensand.

In layer 4 was another patch of charcoal and wood ash 0.6′ deep with three large burnt sandstones and heat-splintered fragments. It covered an area of 2′ x 3′ and continued into the north face of the cutting.

In the upper part of layer 4 was a core of grey mottled flint with sandy yellow cortex together with 18 flakes, of which 8 have the same cortex. These have been kept. (No. 92).

At a depth of 3.5′ the centre of the filling turned to clay of the consistency of plasticene. No shovel could penetrate this material which had to be thrown out with a fork, and efforts made to break it up by hand. This continued down to the bottom of the ditch. A few flakes and sling-stones were found in it up to the end.

In the top of this clay-silt on the south-west curve of the fosse, was a piece of side and base of a thick, coarse vessel (P33) reduced by moisture and weathering to the consistency of cork. At the bottom of IVa a foot in depth was excavated into the undisturbed greensand to show the outline of the ditch clearly in section.

The section (Fig. 5) shows the fosse to be over 30′ wide, 5.8′ deep below the present turf-line in centre ; 9′ below the original surface on the west side, and 13′ below the edge of the cutting on the south.

The sudden drop in the bottom of the centre of the ditch may be accounted for by the action of standing water undermining the soft greensand, and tending by constant erosion to widen and straighten the rounded bottom. This action was observed in progress on a small scale while the fosse was open. This combined with the washings from the clay sides and end, would produce the paste which filled the last two feet.

Cutting IVc. The 2nd Vallum—an extension 10′ x 14′ westward from IVa.

The three top layers were of pure greensand from the bottom of the ditch and the remainder of the upper stratum of clay and surface chert. A few implements and flakes were evenly distributed. Only eight sling-pebbles were found in the first three layers, all at the edges in the growing turf and humus, and there were none at all in the four lower layers.

From 5′ to 6′ below the summit of the vallum the old turf-line, sloping westward down the hill, was apparent in the form of a layer of burnt grey sand, similar to that beneath the bank in C IIg (Ch. report 21). A great deal of charcoal and fragments of burnt sandstone occurred at this level, and an increased number of flakes. Samples of the soil and charcoal are described as " a fine sandy soil containing a large number of flaky fragments of *Common Oak* charcoal . . . as if from the outside of a charred post (?)." (Ch. report 22).

This cutting was taken 0.5′ below the old surface-line into the undisturbed fox-mould, and no sign of further disturbance was discernible on the ground, when it was noticed that in both faces of the section there was a break 2.5′ wide in the calcined turf-line, around which the silted fox-mould was slightly disarranged. Further examination revealed a trench for a wooden Palisade extending north and south across the cutting. (Pl. XX).

The Palisade Trench.

The trench measures 2.2′ in width at top, 0.8′ at bottom and is 3′ deep. It is shaped like a narrow U. The upper filling for a depth of 0.7′ was of yellow fox-mould settled down from the vallum, which was indistinguishable on the surface. Below this to the bottom, was a soft brown-grey filling containing flecks of charcoal, loosely packed and falling away cleanly from the hard sides. The charcoal report on these samples states, " A fine sandy soil, containing a few very small fragments of flaky *oak charcoal ;* might be derived from a charred post. Also, about 5—10 per cent. of fine *charcoal dust*, intermixed with soil. Plant remains not observed, but soluble-humus plentiful." (Ch. report 19 and 20).

A few flakes and an unperforated stone disc (No. 100) were found in the trench and occasional flat packing stones. The sides of the trench were straight, firm, and unweathered.

At each side of the break an extra thickness in the turf-line may be noted, suggesting that the turf removed for the digging of the trench was stacked at the sides or rammed against the base of the palisade.

As no traces of upstanding posts are visible in the section of the vallum (the upper strata of clay and greensand are definitely unbroken), it may be assumed that this palisade was removed or destroyed by fire before the building of the encircling rampart.

It may have served as a temporary barricade till such time as the great fosse could be completed.

It must not be overlooked that both this section of palisade trench and that in C IIIb are close to the entrance and might exist, therefore, only as part of an elaborate defensive gateway and not continue all round the Fort.

The following of these trenches towards the west entrance will be of utmost value in tracing the true course of the roadway into the camp.

Cutting V. 22′ x 37′.

Anyone standing upon the mound or Trig.-Stn. in the centre of the Fort and viewing the southern transverse bank to right and to left, will see that this is inaccurately represented upon all the maps, which show it as a straight line running from west to east. Actually, the eastern half of the bank terminates in the mound itself, and the straight line carried westward would run along the *ditch*—the bank here being 15′ to the north.

This significant point has so far escaped attention.

The cutting was undertaken to expose the ends of the two sections of ditch, which overlap for a distance of 17′—and found them to be reinforced by post holes for a gate or barrier. (Pl. XXI and Fig. 4).

The cutting was taken in two parts ; Va the western ditch, Vb the eastern ditch and the intervening causeway.

C Va. The ditch is 9′ wide at the top and 2.3′ at the bottom, the depth below the present turf-line being 4.4′. It terminates in a narrow, rounded end. The filling was extremely stony throughout. The line of washed-silt at the bottom, varying from 0.8′ in depth on the north side, to 1′ on the south side, is very marked. This section produced nothing but flakes and sling-stones.

C Vb. This ditch is 12′ wide at the top, sloping sharply to 1.7′ at the bottom. Its depth, 5′ below the present turf-line, is deceptive, as some cartloads of yellow fox-mould have, comparatively recently, been tipped over the silted ditch and rammed down to a rock-like hardness to provide a cartway. The older turf-line, 0.6′ in thickness, shows well 2.4′ below this. The latest turf has only had time to attain a depth of 0.5′ as compared with 0.8′ or 0.9′ over the adjoining ditch. A roughly shaped stone disc with countersunk perforation, was found in the lower turf-line (No. 155).

At 1.7′ from the bottom was a layer of ash, charcoal and burnt sandstone, 0.5′ deep. (Ch. report 26—27). A good deal of pottery occurred at the bottom of this ditch, including the pieces of base and rim (Nos. P26, 27, 28), and the carinated bowl (P34) previously described. These lay amongst ash and charcoal, which extended from a ledge on the north side of the ditch over the whole of the curved end, burning the sides to a height of about 2′. There were more flakes here than in the corresponding part of Va.

Besides its convenience as a point of vantage overlooking the entrance, the existence of the *Central Mound* has a perfectly natural explanation in the fact that there is no vallum to the last 20′ of this ditch, and it would be easier to continue to heap the material dug from it upon the end of the bank than to dispose of it elsewhere.

Post Holes.

The position of the post holes can be seen in Pl. XXI and Fig. 4. No. 1 is near the extremity of the eastern ditch, and No. 2 11′ nearer the western.

No. 1 (Pl. XXII) is 2.8′ in diameter at top ; 1.4′ at 0.8′ from the bottom

and 1′ at bottom. It is 1.6′ deep below the excavated surface and 3.1′ below the turf. The sides are straight and the bottom nicely rounded.

The filling was of loose brown soil with flecks of charcoal throughout. It contained one flake, some charcoal, and a fragment of pottery on the bottom.

No. 2 (Pl. XXIII) is well made though shallow. Diameter 3′ at top, 1′ at bottom, depth 1′ below excavated surface, 2.5′ below turf. The sides are hard and clearly defined, and the shape remarkably regular considering the material from which it has been carved.

This entrance is of particular importance, as with the elimination of the passage round the ditch on the west, it appears to be the only point of ingress to the southern part of the Fort. A corresponding break in the northern ditch and bank should be carefully sought for.

Cutting VI. 8′ x 30′.

This was to investigate one of a number of circles, in the north half of the area, which are surrounded by low banks with an " entrance " on one side and enjoyed some reputation as hut-circles. This proved to be recent, as in C I, probably made by testing for scythe-stones. The digging was carried down into the undisturbed fox-mould and produced one arrow-head, a fragment of pottery, and a few flakes from the surface. (Fig. 6).

Cutting VII. 80′ x 10′.

This is at the foot of the inner vallum within the north recurve of the East entrance (Pl. XXIV).

This seemed a likely place for habitations, being sheltered on all sides, the contour of the hill protecting it from south and west.

The cutting was taken in four sections of 20′ each: a, b, c, and d, from south to north.

All sections had a layer of soft brown soil, which was deeper in VIIa owing to extra silting from the recurved vallum.

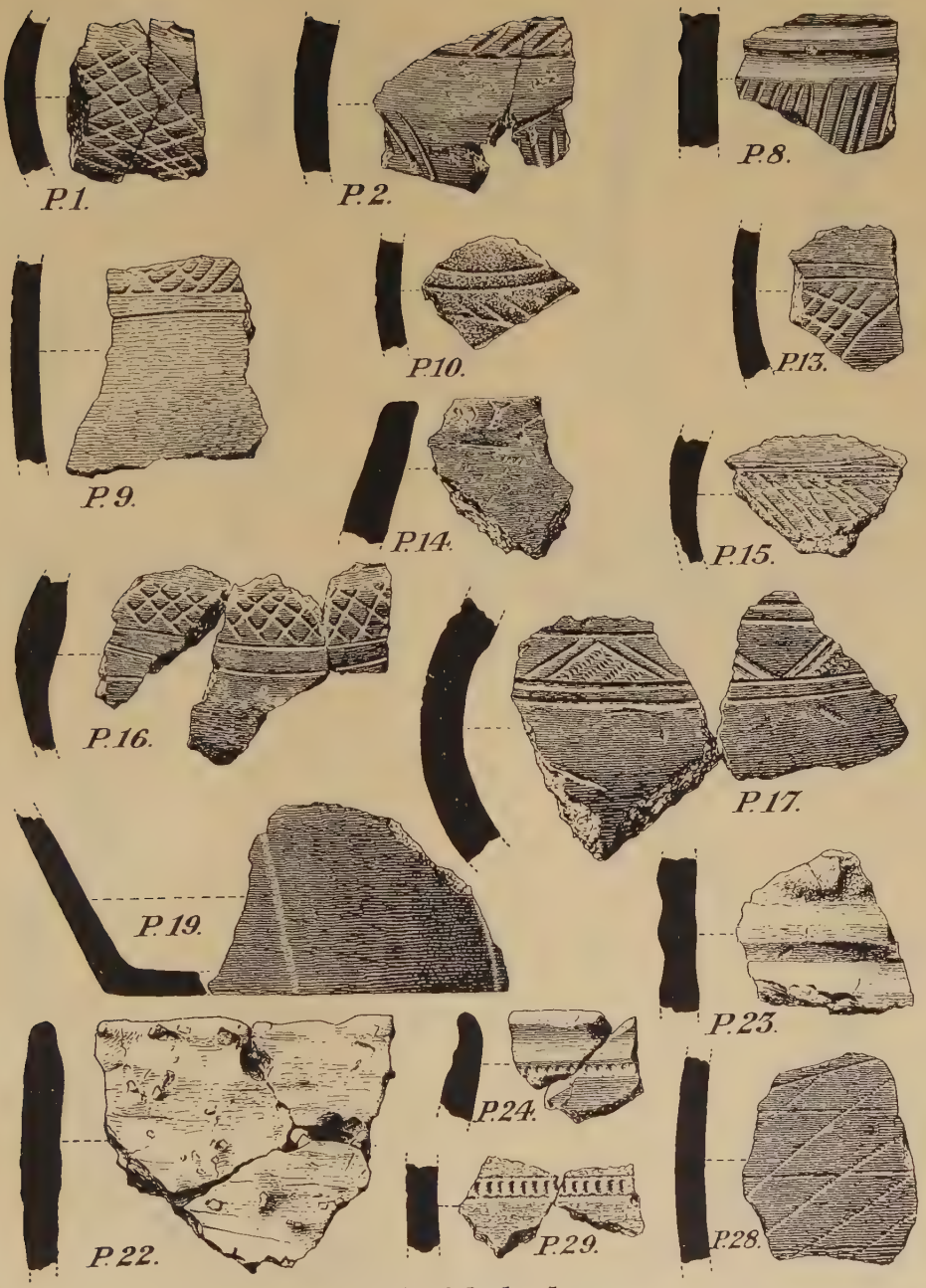
The cutting was dug 3′ in VIIa and 2′ in the other sections onto the undisturbed matrix.

In VIIa was found the butt end of a large axe of stone, foreign to the site (No. 159) and part of a bronze ring described on p. 10. Beside the latter was a patch of charcoal with many pieces of burnt sandstone and some coarse (type *a*) pottery. (Ch. report 23).

Before concluding with the Table of Finds and List of Implements, I wish to record my indebtedness and express my sincere thanks to Mr. Reginald Smith, F.S.A.; Mr. C. Hawkes; Mr. H. St. George Gray, F.S.A.; Dr. H. H. Thomas; Professor D. M. Watson; Mr. G. W. Willis; and Mr. J. F. Rayner; for their advice and opinions on various of the objects found; to Mrs. R. MacAlpine Woods for her illustrations of some of the implements; to Mr. A. Keiller, F.S.A., for the loan of all the surveying instruments and equipment; and to Mr. H. Wykes for leave to make use of the aerial photograph Pl. I.

Pl. XXV. Restored Bowl from C. VB.

Pl. XXVI. (1) Perforated sandstone disc C. VB. No. 156
(2) Unperforated ditto C. IVc. No. 100
(3) Ground celt quartzite pebble. C. III. No. 3
(4) Butt end of large celt. C. VII. No. 160


P.1.
P.2.
P.8.
P.9.
P.10.
P.13.
P.14.
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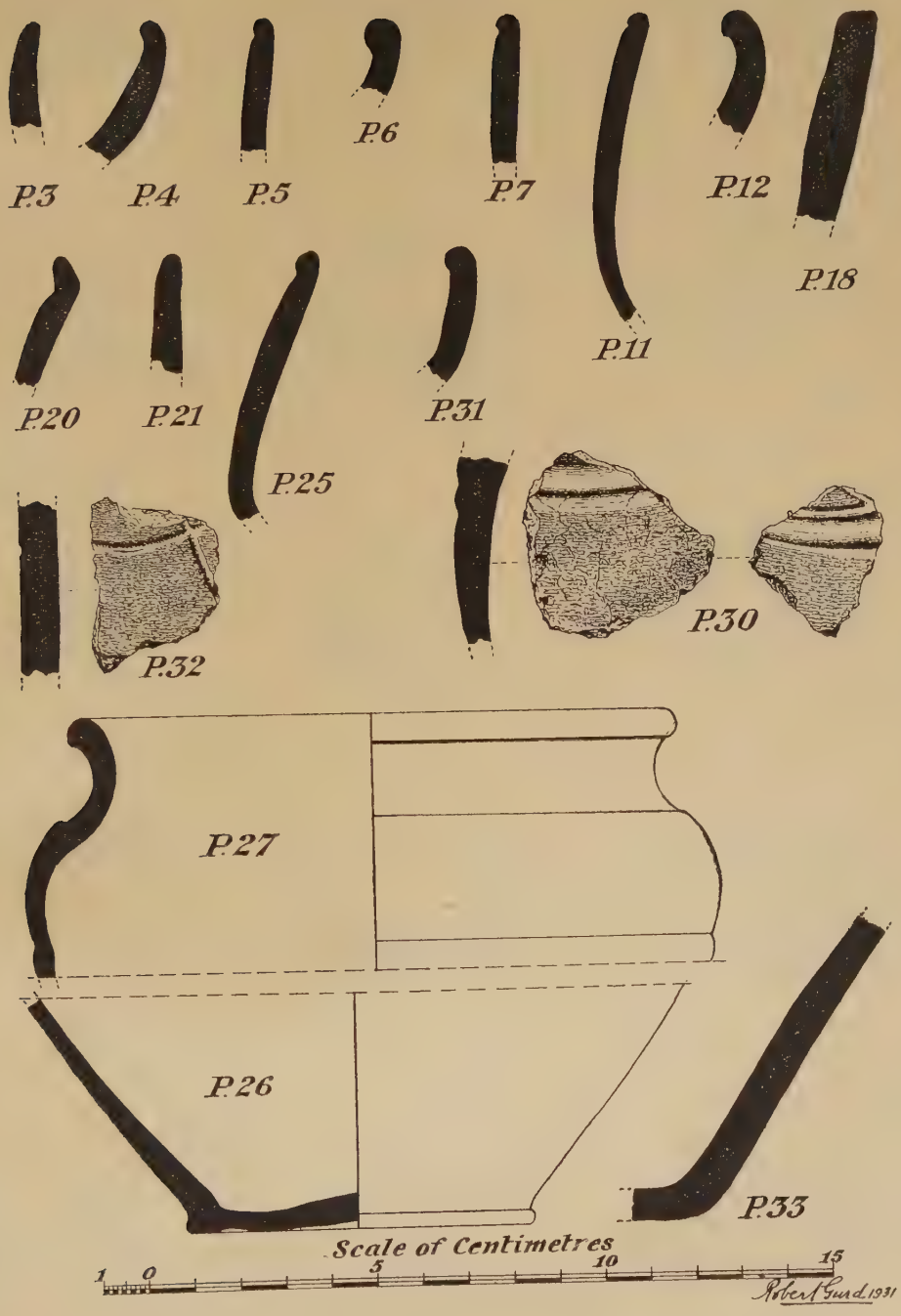
P.19.
P.23.
P.22.
P.24.
P.29.
P.28.
Scale of Centimetres.
1 0 1 2 3 4 5 6 7 8 9 10
Robert Gurd 1930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P.30
P.27
P.26
P.33
Scale of Centimetres
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Robert Gurd 1931

Size approximately 5/8ths

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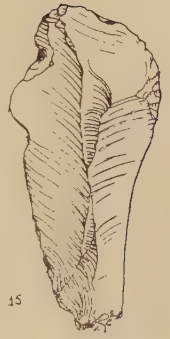
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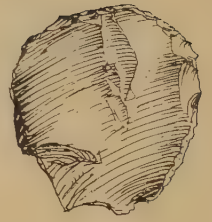
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Gertrude MacAlpine Woods, 1931

Size approximately 5/8ths

Pl. XXX.

29

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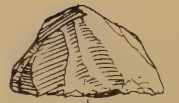
106.



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Gertrude MacAlpine Woods, 1931

Size approximately 5/8ths

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84

56

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74

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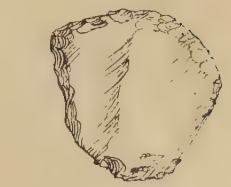
38

6

Gertrude MacAlpine Woods, 1931

Size approximately 5/8ths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Gertrude MacAlpine Woods, 1931

TABLE OF OBJECTS FOUND AT HEMBURY FORT, 1930

Cutting and Layer	Arrow-heads	Scrapers	Cores	Worked Flakes	Chert Implements	Other Implements	Flakes	Pieces (b=burnt)	Chert Flakes	Sling Pebbles	Do. Broken	Large Pebbles	Pottery
C.I.							4	1 (b)		1			
C.II. A & D													
1	1	5					32	5 (1b)	2	7	2		
2		3					29	7	6	8	2		
3		4	1	1		Hammer-stone	24	9 (1b)	3	5	1	1	b
4		3					5		1	2			a
C.II. B													
2	3	3	1	2		Quart-zite Rubber	19	9 (1b)	4	15	10		a, c
3		2	2				48	6 (1b)	9	17	11		a, b
4							16	6 (2b)	2	11	3		a, b, c
C.II. C													
1		2		2	1	Beaked Imple-ment	35	5 (2b)	1	53	14	3	d
2		1		2			13	1 (b)	1	21	15	2	b, c
C.II. E													
1	1	1	3	1		Hammer-stone	57	10 (4b)	6	52	3	4	c
2		1	1	2			35	3 (1b)	4	37	1	3	b
Post Hole 2							3						
C.II. F													
1		1		1		Hammer-stone	5	6 (3b)		32	4	2	
2						Hammer-ed Peb-ble	33	(3b)	4	105			c, d,
3		1	1	1			11	7 (b)	5	31	1	1	c, d, x
4	2	1		1		Frag-bone	12			3		1	b, d
5							4			3		1	

Cutting and Layer	Arrow-heads	Scrapers	Cores	Worked Flakes	Chert Implements	Other Implements	Flakes	Pieces (b=burnt)	Chert Flakes	Sling Pebbles	Do. Broken	Large Pebbles	Pottery
C.IIG. Vallum													
1			3			Chopper	72	18 (8b)	3	25	1	1	
2		3					24	18 (6b)		14			b, c, x
3		3	2				9	6 (3b)		30			c
4		1		1			17	11 (6b)		47			b, c
5		1	1	1		Chopper	62	39 (7b)	2	207		1	a, b, c
6							6		1	14			
Post-hole							4			6			c
C.II.													
Refill							5	4 (2b)	1				c
C.III.													
1							9	9					
2	1					Ground Celt	6	10	2	5			d
3	3	2		1			26	12 (2b)	3	12	2		b,c,d
4		1				Graver	9	2		10			a,b,c,d
Widening 3	2			1			24	6		10			
Widening 4													
Refill							7	5					
C.IIIB. Ditch													
1					3	Quartzite Whetstone	29	22 (8b)	2	93		2	
2		2	1		1	Chopper	25	19 (4b)		14		2	
3				1	2	Chopper	27	15 (3b)		3		1	
4	1	2	1				17	9 (4b)	1	1			

Cutting and Layer	Arrow heads	Scrapers	Cores	Worked Flakes	Chert Implements	Other Implements	Flakes	Pieces (b=burnt)	Chert Flakes	Sling Pebbles	Do. Broken	Large Pebbles	Pottery
C.IIIB. Vallum													
1		1	1		3	Tip of ? Javel in Quartzite Whetstone	14	12 (3b)	1				
2		1				Core-Plane	29	7 (2b)	2	1 (turf)			
3	2	3	1	3	3	Knife	136	51 (17b)	6	1 (turf)			a
Turf Level													
4		6	1				52	21	1			a,?c (burnt)	
Post-holes						Knife	27	18 (6b)	1				a,?b,c
Palisade							7						
C.IVB. Slope													
1							1			2			
2			1				7			3	1		
C.IV. A & B													
1		2		3		Chopper	25	1					
2	1	1	1	4			34	7 (2b)	3	9	3		
3		3		2			30	9 (1b)	4	3			x
4			1	1			19	11 (4b)		10	3		x
5			2				25	7 (4b)	4	33	2	1	
6							14	1		13			
Cleaning							11			10	2	1	
Refill							3	3 (1b)	1				
C.IVc. Vallum													
1				1			3						
2	1	2			2	Choppers	2			4 (turf)			
3	1					Chopper	2	1	2	2 (turf)			
4	1	2	1				2 (b)			2 (turf)			
5				2			4	1	2				
6							7	3 (b)	2				
7							17	11 (7b)				1	
Palisade						Stone Disc	5(2b)		1				

Cutting and Layer	Arrow heads	Scrapers	Cores	Worked Flakes	Chert Implements	Other Implements	Flakes	Pieces (b=burnt)	Chert Flakes	Sling Pebbles	Do. Broken	Large Pebbles	Pottery
C.Va. W. Ditch													
1			1				7	14 (b)		15			
2					1			1 (b)		3			
3			1		1		2	8 (b)	2	11		2	
4						Core-Plane	2	3 (1b)		1			
C.Vb. E. Ditch													
1			1		1		16	10 (5b)		8			c
2		1	1			Perforated Disc	13			2			b
3				1		Sandstone Rubber	7			8		1	d, x
4			1				2	1		6	1	1	
Post-hole			1										b
Causeway						Core-Plane							
C.VI.													
1		1					3	4 (2b)		3	1		
2	1	1					14	11 (2b)		7	6		c
C.VIIa.													
1							19	6 (2b)		5	4		
2							2			6			b, c, d
3			1		1	Bronze Ring Frag. Celt of Hornblende Schist	11	2		17	2		b, c
C.VIIb.													
1										3	1		
2		1	3			Core-Plane Knife	21	13 (4b)		5	1		a, b, c
C. VIIc.													
1	1									4			
2					1								b, a
C.VIId.													
1							2			5		1	
2							2		1	19			c
C.VII. Refill								4 (b)					

THE EXETER—HEMBURY FUND

Account of Receipts and Payments for the 1930 Season

RECEIPTS	£	s.	d.
To Subscriptions by Members of the Devonshire Association	16	7	6
,, Subscriptions by Members of the Devon Archæological Exploration Society ...	26	19	6
,, Subscriptions by Members of both the Devonshire Association and the Devon Archæological Exploration Society	62	8	0
,, Subscriptions by Members of the Public ...	32	5	6
,, The Collecting Box at Hembury Fort ...	7	6	5
,, The Collecting Box at Ugbrooke Field Meeting	4	0	1
,, Grant from General Fund of the Devon Archæological Exploration Society ...	60	0	0
,, Grant from Excavation Fund of the same Society	40	0	0
	£249	7	0

PAYMENTS		£	s.	d.
By Expenses of " Appeal " and Advertisement ...		41	5	4
,, Cost of Equipment, including transport thereof and hire of tarpaulins		19	2	3
,, Wages and Workmen's Insurance ...		151	13	3
,, Various Incidental Expenses		1	0	9
		£213	1	7
,, Balance carried forward to 1931 Season—				
In Barclay's Bank, Exeter	34 18 9			
Cash in hand	1 6 8			
		36	5	5
		£249	7	0

Audited and found correct,
HAROLD MOORE, F.C.A.,
Hon. Auditor.

23/2/31

F. B. O'DOGHERTY,
Hon. Treasurer

KING ALFRED'S COLLEGE LIBRARY

KU-402-218